

What Is Claimed Is:

1. Apparatus for reducing mitral regurgitation,  
the apparatus comprising:

5 a bendable elongated body adapted to be inserted  
into the coronary sinus of a patient in the vicinity  
of the posterior leaflet of the mitral valve, the  
elongated body being adjustable between a first  
configuration adapted to be delivered into the  
10 coronary sinus and a second configuration adapted to  
exert a force onto the posterior annulus, the body  
comprising:

a flexible spine having a proximal end and a  
distal end; and

15 a flexible wire mounted on said spine and having  
a distal end fixed to said spine proximate to the  
distal end of said spine, and having a proximal  
portion extending from the proximal end of said spine;

whereby axial movement of said wire causes a  
20 change in said spine from the first configuration to  
the second configuration to exert the force on the

posterior annulus and thereby reduce mitral  
regurgitation.

2. The apparatus in accordance with claim 1,  
5 wherein the axial movement of said wire in a proximal  
direction causes said spine reconfiguration to a  
lesser curve having a greater radius of curvature.

3. The apparatus in accordance with claim 1  
10 wherein the axial movement of said wire in a distal  
direction causes said spine to reconfigure to a more  
pronounced curve having a lesser radius of curvature.

4. The apparatus in accordance with claim 1  
15 wherein the first configuration is curved and the  
second configuration is a selected one of (i) more  
curved and (ii) less curved.

5. The apparatus in accordance with claim 4  
20 wherein the less curved configuration is substantially  
straight.

6. The apparatus in accordance with claim 1 wherein said spine is provided with barbs thereon.

5 7. The apparatus in accordance with claim 1 wherein said spine comprises portions each defining a channel for said wire.

10 8. The apparatus in accordance with claim 1 wherein loops are fixed to said spine and said wire extends through said loops and is movable therethrough.

15 9. The apparatus in accordance with claim 8 wherein the loops are defined by staples.

10. Apparatus for reducing mitral regurgitation, the apparatus comprising:

20 a bendable elongated body adapted to be inserted into the coronary sinus of a patient in the vicinity of the posterior leaflet of the mitral valve, the

elongated body being adjustable between a first configuration adapted to be delivered into the coronary sinus and a second configuration adapted to exert a force onto the posterior annulus, the body comprising:

a flexible spine having a proximal end and a distal end; and

a flexible wire mounted on said spine and having a distal end fixed to said spine proximate to the distal end of said spine, and having a proximal portion extending from the proximal end of said spine;

whereby pulling of said wire causes straightening of said spine to move said spine from the first configuration to the second configuration to exert the force on the posterior annulus and thereby reduce mitral regurgitation.

11. The apparatus in accordance with claim 10 wherein loops are mounted on said spine and said wire is movable therein.

12. The apparatus in accordance with claim 11 wherein said loops are staples.

13. A method for reducing mitral regurgitation, the method comprising the steps of:

positioning a prosthesis in a coronary sinus, the prosthesis comprising:

a bendable elongated body adapted to be inserted into the coronary sinus of a patient in the vicinity of the posterior leaflet of the mitral valve, the elongated body being adjustable between a first configuration adapted to be delivered into the coronary sinus and a second configuration adapted to exert a force onto the posterior annulus, the body comprising:

a flexible spine having a proximal end and a distal end; and

a flexible wire mounted on said spine and having a distal end fixed to said spine proximate to the distal end of said spine, and having a proximal

portion extending from the proximal end of said spine;  
and

moving the wire axially to cause a change in the  
spine from the first configuration to the second  
5 configuration to exert the force on the posterior  
annulus and thereby reduce mitral regurgitation.

14. A method for reducing mitral regurgitation,  
the method comprising the steps of:

10 positioning a prosthesis in a coronary sinus, the  
prosthesis comprising:

20 a bendable elongated body adapted to be inserted  
into the coronary sinus of a patient in the vicinity  
of the posterior leaflet of the mitral valve, the  
elongated body being adjustable between a first  
configuration adapted to be delivered into the  
coronary sinus and a second configuration adapted to  
exert a force onto the posterior annulus, the body  
comprising:

a flexible spine having a proximal end and a  
distal end; and

a flexible wire mounted on said spine and having  
a distal end fixed to said spine proximate to the  
distal end of said spine, and having a proximal  
portion extending from the proximal end of said spine;  
and

pulling the wire to straighten the spine to move  
the spine from the first configuration to the second  
configuration to exert the force on the posterior  
annulus and thereby reduce mitral regurgitation.

15. A method for reducing mitral regurgitation,  
the method comprising scarring the mitral valve  
annulus to cause contraction thereof.

16. The method in accordance with claim 15  
wherein the scarring is accomplished by injecting a  
scarring medium into the mitral valve annulus.

17. The method in accordance with claim 16  
wherein the medium comprises energy selected from a

group of energies consisting of chemical, thermal,  
cryogenic, laser and radio frequency.

10058700-020502